



#8/a Harry
PATENT
Docket No.: 201040/1020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

John 30/a

Applicant(s) :	Alam et al.)	Examiner:
Serial No. :	09/455,978)	H. Schnizer
Cnfrm. No. :	5811)	Art Unit:
Filed :	December 6, 1999)	1653
For :	HEME PROTEINS HEMAT-HS AND HEMAT-BS AND THEIR USE IN MEDICINE AND MICROSENSORS)	

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Box: Sequence

Dear Sir:

Please amend the above-identified patent application as follows:

In the Specification:

Please delete the paragraph extending from page 20, line 19 to page 21, line 4,
and replace it with the following paragraph:

The HtrVIII is a positive aerotaxis transducer in *H. salinarum* (Brooun et al., J. Bacteriol., 180:1642-1646 (1998), which is hereby incorporated by reference). A strain deleted for the *htrVIII* gene lacks positive aerotaxis while a strain overproducing the protein shows an enhanced aerotactic response. To investigate the possible role of HemAT-Hs and HemAT-Bs in aerotaxis, deletion mutants of these genes were constructed (Brooun, Ph.D thesis. University of Hawaii, Hawaii (1997), which is hereby incorporated by reference) for the construction of *hemAT-Hs* deletion strains. Construction of overexpression of *hemAT-Hs* in *H. salinarum*: *NdeI* and *XbaI* restriction sites were used to clone the *hemAT-Hs* gene into the *E. coli-H. salinarum* shuttle vector pKJ427. Top primer with *NdeI* cutting site